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Sarawak Sustainability Vision 2030

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PCDS 2030 is anchored upon six key economic sectors & seven key enablers, with *Renewable Energy* and *Utilities* as key enablers

Vision

By 2030, Sarawak envisions a prosperous society led by data and innovation, ensuring ***economic prosperity***, ***social inclusivity***, and ***environmental sustainability*** for all.

Energy-specific targets

- Maintain at least 60% renewable energy capacity mix by 2030
- 600k tonnes annual reduction of CO2 via electrification of mobility fleet
- Achieve >15% income from foreign markets outside of Sarawak

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Our energy transition strategies

1. Diversifying energy systems
2. Becoming a renewable energy powerhouse in the region
   - Catalysing through SCORE
   - Infrastructure expansion
   - Power export and partnerships
3. Sustainable digital utility
4. Decarbonising our energy systems
5. Integrated sustainable energy solutions

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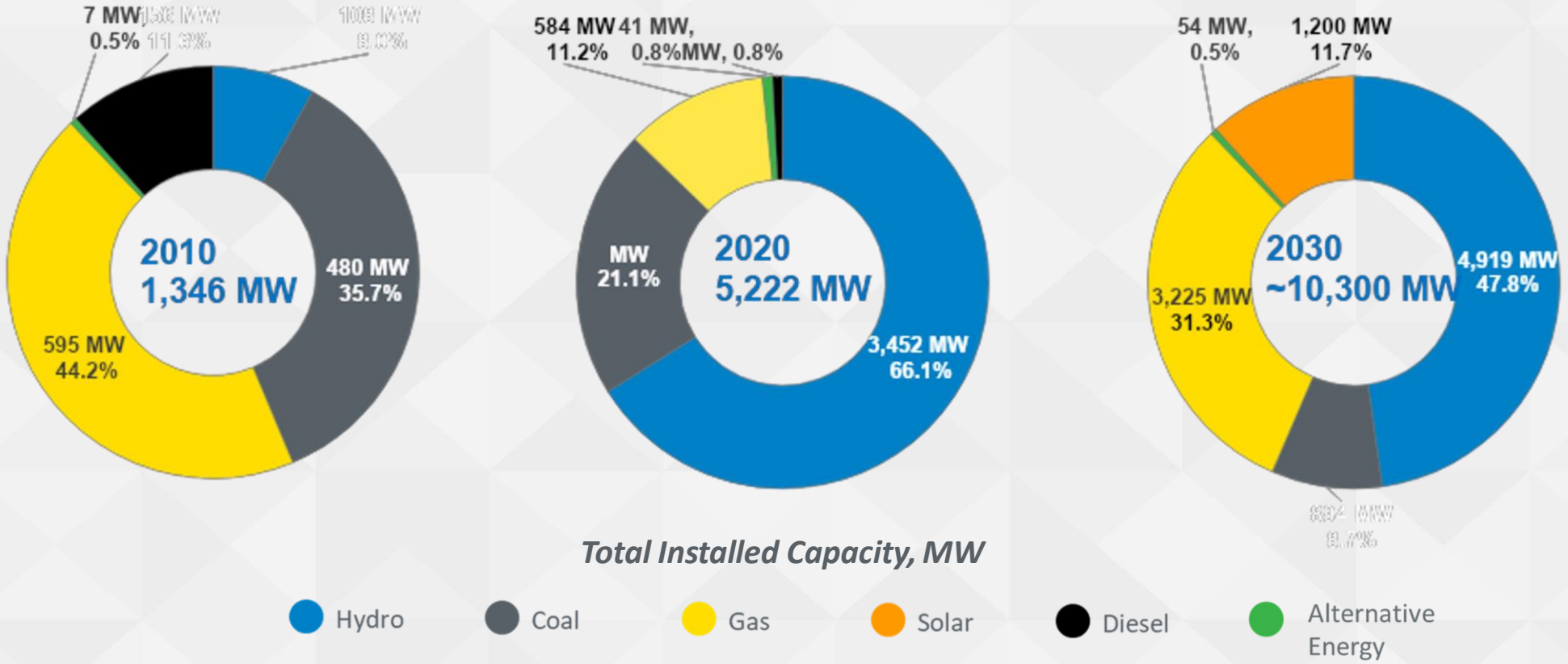
Diversifying our ENERGY SYSTEMS

Sarawak's energy transition journey to 10GW by 2030

- Predominantly renewable hydropower and recognised as part of Malaysia's renewable energy target since 2021
- Balanced by indigenous thermal to maintain diversity and security of supply



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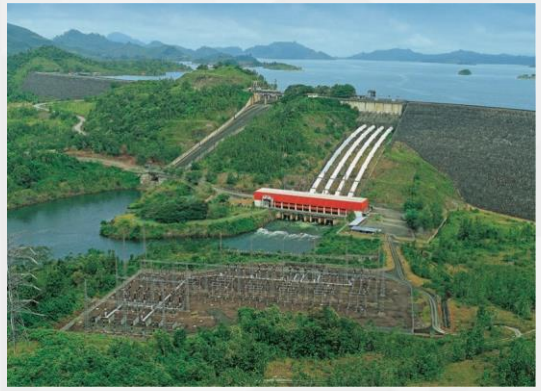
Our renewable energy expansion has been based on the advancing renewable hydropower



Batang Ai	Bakun	Murum	Baleh
• 108MW Installed Capacity • Commissioned in 1985	• 2,400MW Installed Capacity • Commissioned in 2011	• 944MW Installed Capacity • Commissioned in 2014	1,285MW Installed Capacity Expected Commissioning Date: 2027

CIGB ICOLD

iha international hydropower association

Our Hydropower developments guided by International Commission on Large Dams (ICOLD) standards and guidelines and IHA Sustainability Assessment Protocol (now formally embedded in project development process), built and operated safely and efficiently.

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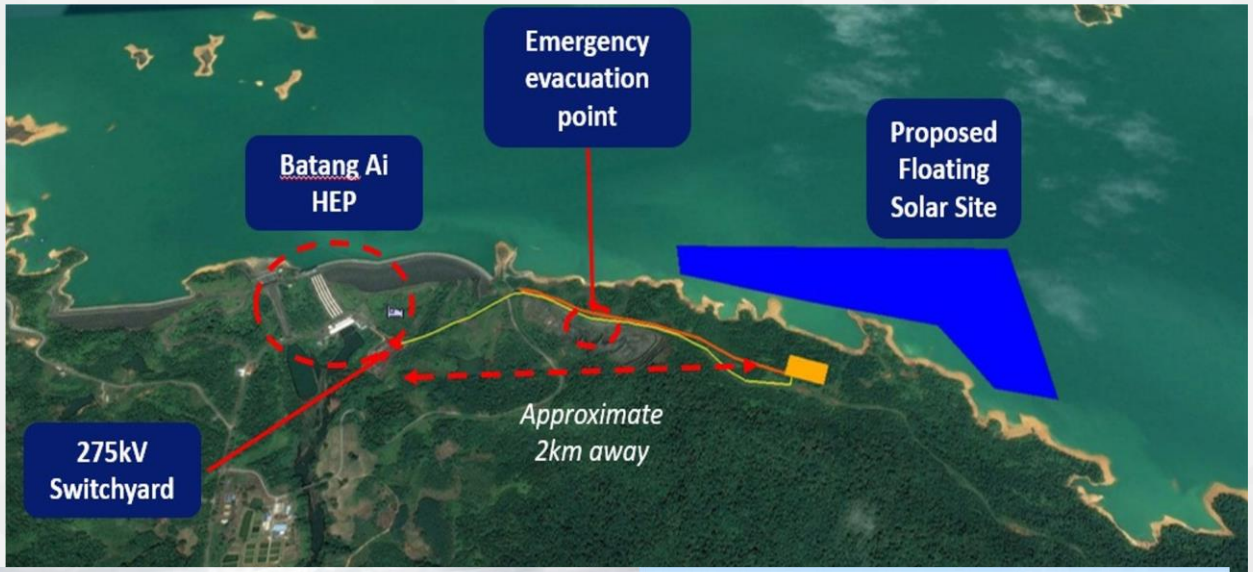
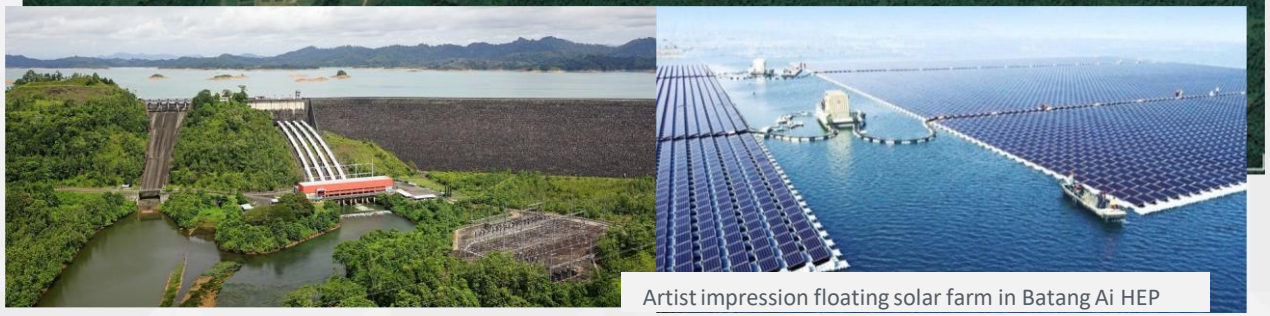
Increase our solar energy footprint: The Batang Ai Floating Solar Farm (50MW)

Batang Ai Floating Solar Farm (50MW)





Artist impression floating solar farm in Batang Ai HEP

Low Environmental Impact

- **No deforestation**
- **Ease of Deployment** (Minimum Site Preparation)

Higher Energy Yield

- Water Cooling Effect to Panels

10 to 15% Higher Yield

Water Conservation

- Reduce evaporation
- Water reclamation (Panel Cleaning)
- Algae Growth Reduction (Lake Ecology)

Huge Expansion Potential

- Huge Hydro footprint
- Leverage HEP Infrastructure, Transmission capacity

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Increasing our battery energy storage system 60MWh BESS in Sejingkat Kuching - *First Pilot Project*

Proposed Layout for BESS Plant located at existing SPC Coal Fired Power Plant

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Becoming a renewable energy powerhouse in the region

- *Catalysing through SCORE*
- *Infrastructure expansion*
- *Power export and collaboration with other states*

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Creating supply and demand through the Sarawak Corridor of Renewable Energy

SARAWAK CORE
CORRIDOR OF RENEWABLE ENERGY

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Expansion of grid infrastructure: Proposed interconnection in Borneo as part of the ASEAN Power Grid

Borneo Grid

- Brunei
- Indonesia
- Malaysia
- Philippines
- Singapore

- Existing Interconnection
- Potential Interconnection

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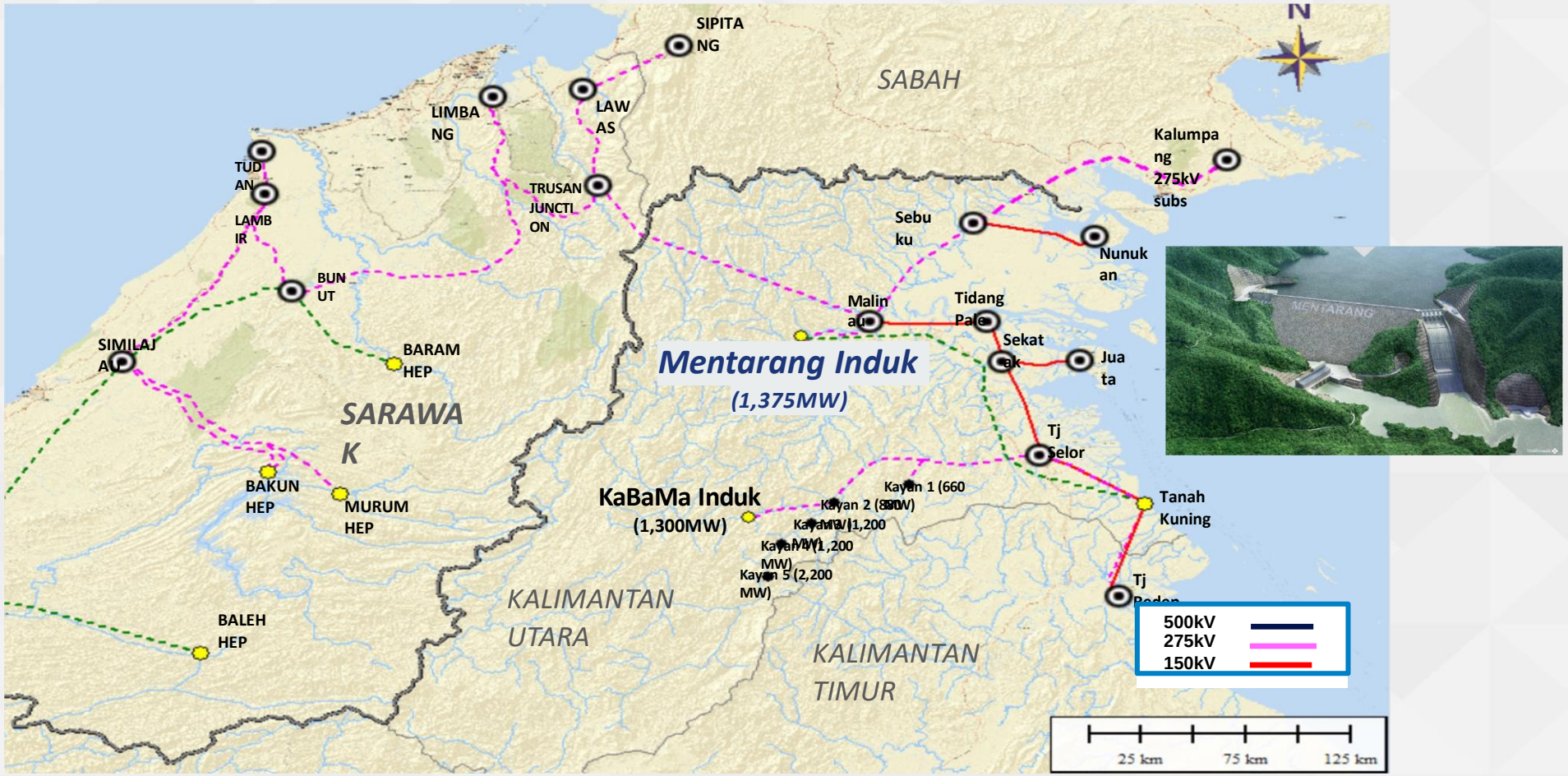
The Mentarang Induk HEP Project will partner with Indonesia to develop 1,375 MW hydroelectric in North Kalimantan



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Exploring the Sarawak-Singapore potential interconnection to export power to Singapore

Interconnection feasibility study is ongoing to determine the optimal technical scope and assess the potential risks and benefits.

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Sustainable digital utility

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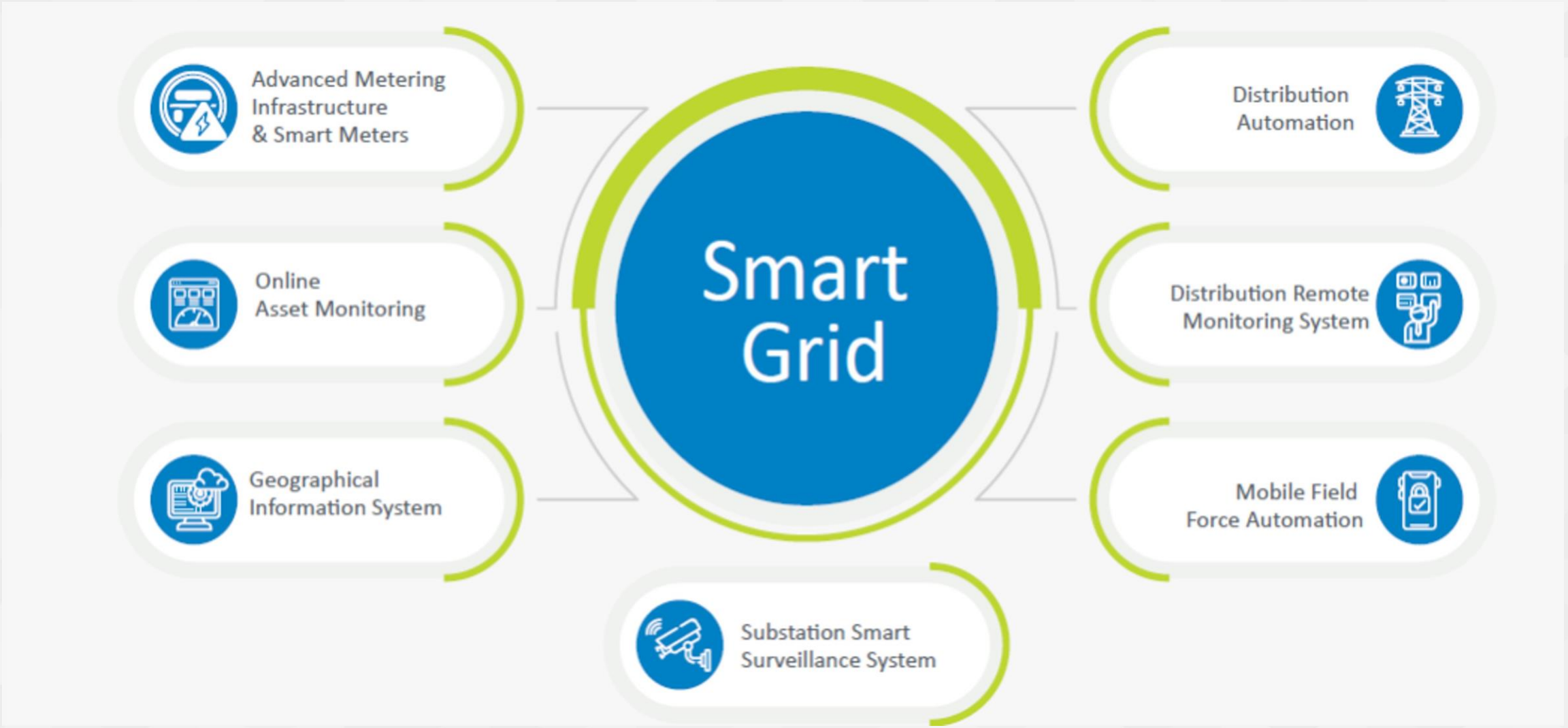
Rapidly transforming our utility system through digitalisation



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Decarbonising our energy systems

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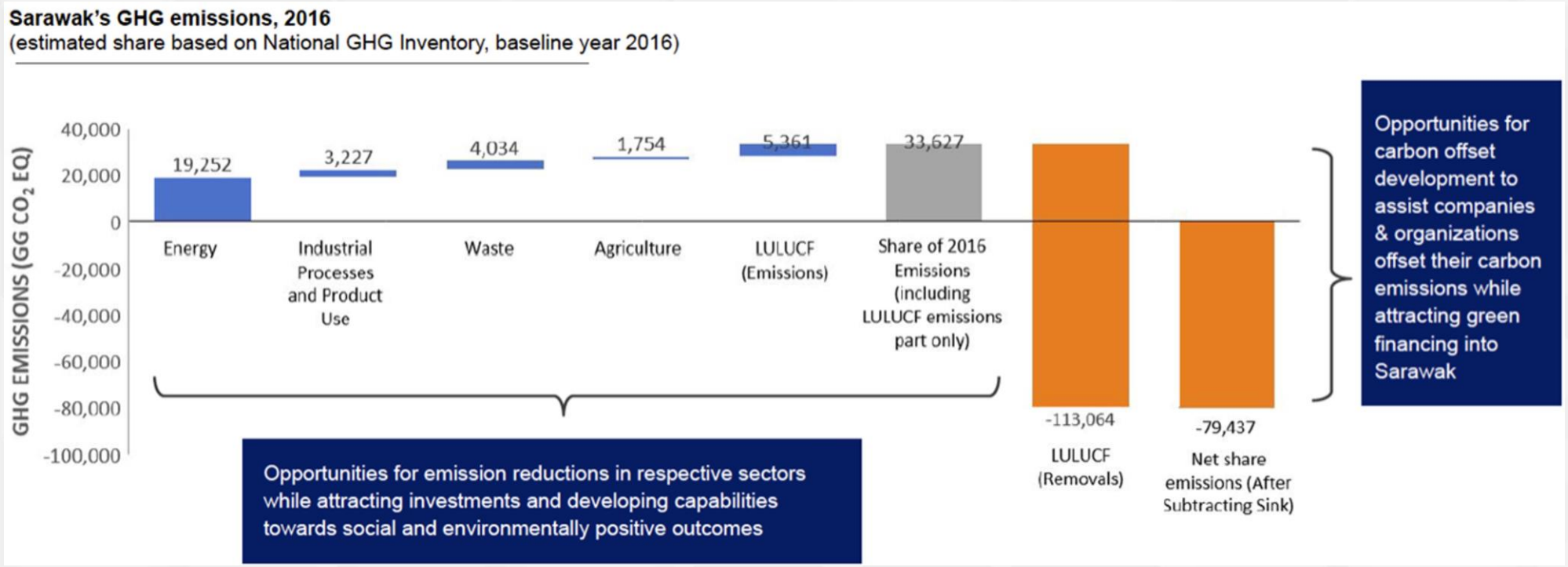
Energy is one of the highest contributor of Sarawak's GHG emissions, creating opportunities for emission reductions

The Focus: Sarawak's GHG emission



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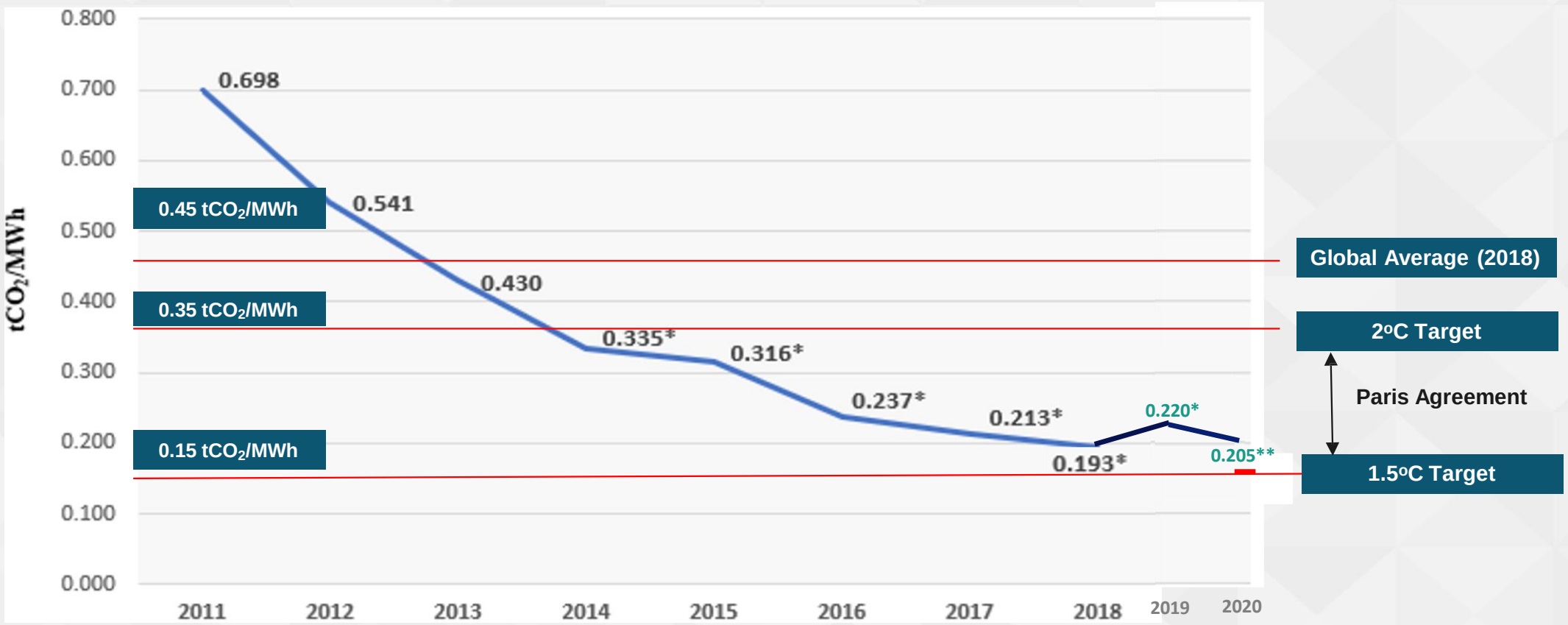
Sarawak Energy Berhad plays a critical role to decarbonise our grid system, ensuring that interim target is SBTi-aligned

Sarawak Energy's Electricity Emission Intensity



*Notes: These figures has been assured by Third Party; **Undergoing Third Party Assurance*

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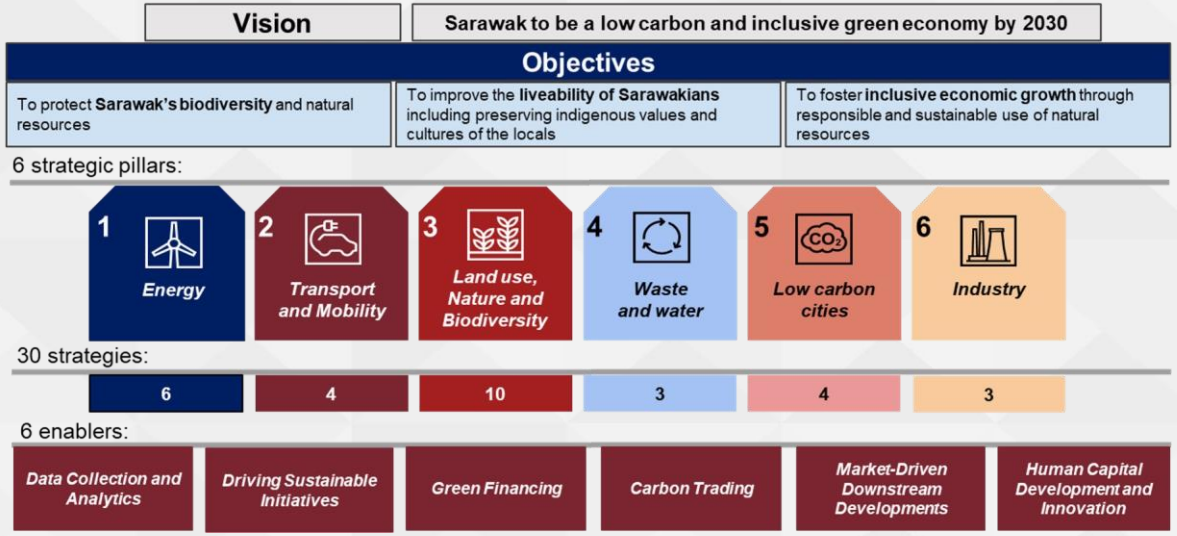
Supporting policies and regulations to demonstrate our commitment to decarbonise our energy systems and harness the green growth opportunity

Sarawak's Green Economy Policy sets out the vision to achieve 3 policy objectives, supported by 6 strategic pillars and 6 enablers



The Environment (Reduction of GHG Emissions) Ordinance 2023 that first prioritise the energy sector

- ✓ Introduced **carbon levy** for the energy sector, particularly the oil and gas companies
- ✓ **High-integrity carbon credit mechanism** for offsets

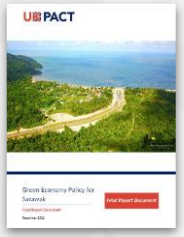
Sarawak is progressing into implementation in alignment with the policies, designing implementation mechanisms to operationalise the GHG Ordinance

Horizontal alignment

1 2 3

Socio-economic development policies and plans

Statewide economic development masterplan which also identifies green growth sectors and supporting infrastructure



Climate change, nature and biodiversity policies and plans

Provide Sarawak's climate change, biodiversity and nature policies and recommend implementation initiatives

Net Zero Strategy and Carbon Plan

More in-depth into decarbonisation strategy based on emissions data across the different sectors by setting science-based interim target and emission budget across the key sectors, while providing guidance on implementation

- Closer implementation detail

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Integrated sustainable energy solutions

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Sarawak creates more demand for renewable energy through an integrated system

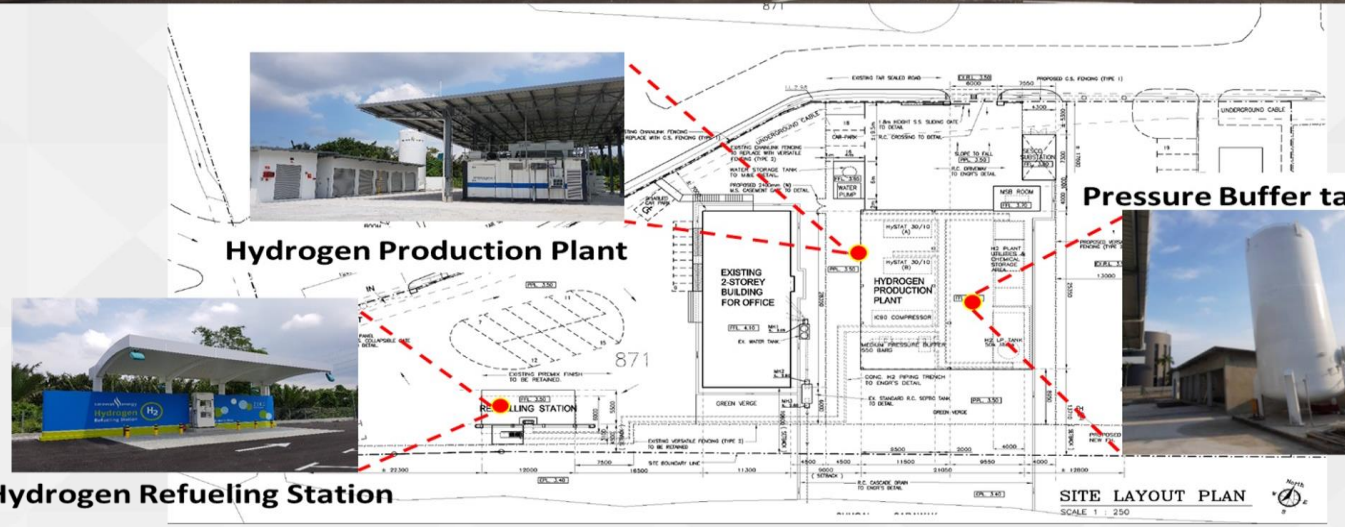
Hydrogen energy development

- Built and commissioned Southeast Asia's first hydrogen production plant with production capacity of 130kg H2 per day and refueling station
- Hydrogen ART, buses and cars to create demand

Transportation

- Supporting the electrification of Kuching's transport sector
  - EV Roadmap: Expanding EV charging stations and electric buses
- Sustainable Aviation Fuel

Others: CCUS



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Sarawak's Autonomous Rapid Transit (ART) Hydrogen Vehicle (H2V)

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Thank you